

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/601,460 06/23/2003		Li An	20.2862	9723	
23718	7590 06/22/2005		EXAM	INER	
SCHLUMBI	ERGER OILFIELD SI	SHRIVASTA	SHRIVASTAV, BRIJ B		
200 GILLING	HAM LANE				
MD 200-9			ART UNIT	PAPER NUMBER	
SUGAR LAN	D, TX 77478		2859		

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.





UNITED STATES DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

FILING DATE

FIRST NAMED INVENTOR / **PATENT IN REEXAMINATION** ATTORNEY DOCKET NO.

EXAMINER

ART UNIT

PAPER

20050617

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

IDS dated 6/23/03 and 2/7/05 are considered.

LIST OF INFORMATION PROVIDED BY APPLICANT (Use several sheets if necessary)				20.2862	SERIA	AL NO.
				APPLICANT: Li An et al.		
·:						
	•			FILING DATE:	GROUI	?
	DESTGNAT!	ON U.S. PATENT DOCUM	ients		J	
Examiner Initial		Document No.	Date .	Pat	entee	
b -	AA	6,111,409	08/29/00	Edwards et al:		وهو ووند خاکه که حد کارک کی و هو و سطو کی
b	AB	6,140,812	10/31/00	Russell et al.		
R	AC	6,346,813	02/12/02	Kleinberg	~~~~;·································	,
	AD	The second section is the second seco			· · · · · · · · · · · · · · · · · · ·	· · · · · ·
	AΕ			1		·
	AF		/			
	AĞ	en e	/	<u> </u>	***************************************	· ·
	AH					
	Αİ					******
FOR	EIGN PATEN	T DOCUMENTS			I m 11 - 12 - 14	
		Document No.	Date	Country	Translation Yes	No.
	AJ					
**************************************	ÄМ					*****
	AN					
	AO	/				
OTHER INFO	ORMATION E	PROVIDED (AUTHOR, TITLE	, DATE, PLAC	CE OF PUBLICATION, .	PERTINENT PA	GES,
E/	AR	EL Hahn & DE Maxwell, in Molecules,'' Physi	``Spin Echo cal Rev. 88,	Measurements of Nu no. 5, pp. 1070-10	clear Spin C 84 (1952)	oupling
K	AS	L Muller, A Kumar & R Spectroscopy,'' J. Ph	R Ernst, NT ys. Chem. 63	wo-dimensional Carb , pp. 5490-5491 (19	on-13 NMR 75)	:
p	АТ	FD Doty, RR Inners & Applications with Sol J. Magnetic Res. 43,	ids or Liqui	ds utilizing Lumped	le-Tuned Pro I Tuning Elem	be for ments,''
EXAMINER	Book	Sem		DATE CONSIDERED		
EXAMINER: Init	ial if referer	co considered, whather or not ci	tation is in confe	ormance with MPEP 609; Draw	line through citat	ion if

onformance and not considered. Include copy of this form with next communication to applicant.

The attached cited information should not be construed as an admission that any of the above items are prior art to the subject invention.

This is not a representation that a search has been made.

FORM PIO-	LIST OF	INFORMATION PROVIDED BY APPLICANT	•	20.2862	SERIAL NO.	
	(Use seve	ral sheets if necessary	7)			
		•		APPLICANT: Li An et	al.	
			·	FILING DATE	GROUP	
REFERENCE	DESIGNATI	ON U.S. PATENT DOCUM	1ENTS		<u> </u>	
Examiner Initial		Document No.	Date	Pate	ntee	
*	BA			/	<i>f</i>	
	BB					
	ВÇ				ana ana ana ana ana ana ana ana ana ana	
	BD					
	BE					
	BF					
	BG					
	BH	***************************************				
	BI					
FOR	EIGN PATEN	IT DOCUMENTS		<i>y</i>		
		Document No.	Date	Country	Translation Yes No	
	BL					
	BM					
A	BN					
	BO		<u> </u>			
OTH PAGES, ÉT		ATION PROVIDED (AUTHOR,				
B	BR	MH Levitt, ``Symmetri Inversion,'' J. Magne	cal Composit tic Res. 48,	e Pulse Sequences fo pp. 234-264 (1982)	r NMR Population	
K	BS	MH Leavitt & R Freeman, ''NMR Population Inversion using a Composite Pulse,'' J. Magnetic Res. 33, pp. 473-476 (1979)				
B	ВТ	SR Hartmann & EL Hahn, "Nuclear Double Resonance in the Rotating Frame," Phys. Rev. 128, no. 5, pp. 2042-2053 (1962)				
EXAMINER	Bont	bern	The second secon	DATE CONSIDERED		
***			· · · · · · · · · · · · · · · · · · ·	 	And a series of the series of	

FORM PIO-	LIST OF	INFORMATION PROVIDED BY APPLICANT		20.2862	SERIAL NO.
	(Use sever	al sheets if necessary)		
	·			APPLICANT: Li An et	al.
				FILING DATE	GROUP
REFERENCE	DESIGNATI	ON U.S. PATENT DOCUM	ENTS		
Examiner Initial		Document No.	Date	Pat	entee
	CA				
	CB \				
	CC				
	CD				
	CÉ				
	CF		· · · · · · · · · · · · · · · · · · ·		
	CĠ		·		
*	CH		/	· · · · · · · · · · · · · · · · · · ·	
	ĊI				
FOR	EIGN PATEN	T DOCUMENTS		l	
		Document No.	Date	Country	Translation Yes No
	ÇL		/		
	СМ		· · · · · · · · · · · · · · · · · · ·		
· .	CN	1	·····		
	CŎ		·····		
OTH PAGES, ET		TION PROVIDED (AUTHOR,	TITLE, DAT	E, PLACE OF PUBLICAT	ION, PERTINENT
E	CR	GA Morris & R Freeman, Signals by Polarizatio 760-762 (1970)	''Enhancen on Transfer	ent of Nuclear Magne ,'' J. Am. Chem. Soc	etic Resonance . 101, no. 3, pp.
	cs				
***************************************	СТ				
EXAMINER		In Sur	· · · · · · · · · · · · · · · · · · ·	DATE CONSIDERED	-

FORM PTO-1449 (Modified) LIST OF INFORMATION PROVIDED BY APPLICANT				ATTY. DOCKET NO. 20.2862	SERIAL NO. 10/601,460		
FEB 0 7 2005			APPLICANT: Li An et al.				
KREEKEE		TION U.S. PATENT DOCK	MKNUS	FILING DATE: 06/23/03	GROUP		
Examiner	EMBIP	T	Т	l .			
Initial	AA	Document No. 5,955,883	Date 09/21/99		tentee		
	~~	3,933,663	03/21/33	Hennig	•		
E	AB	6,104,191	08/15/00	Hurd			
12	AC	US 2002/0075000	06/20/02	Prammer et al.			
	AD						
	AE		 / 		W		
	AF						
	AG	/	1				
	AH						
	AI	 					
FOR	er (Ginemessand)	NT DOCUMENTS					
14					Translation		
- Je	AL	Document No.	Date 06/09/04	Country Great Britain	Yes No		
E			30,00,00				
B	AM	0 514 978 A1	11/25/92	EPO			
	AN	1 098 204 A1	05/09/01	EPO			
	AO						
R_	AR	LA Davis et al., "The Modulation of Coupled Relaxation in Porous Media," Magnetic Resonance Imaging 19 (pp. 369-373 (2001)					
12	AS	TJ Norwood et al., "Measur Doublets," Journal of Me					
	AT	,					
EXAMINER EXAMINER: INTE	Jan 11 relar	Bund	citation to the	DATE CONSIDERED	0 (
1. The att	tached cited tinvention.	obt considered. Include copy of the information should not be construction that a search has been	ued as an admissi	communication to Applicant. on that any of the above ite	ms are prior art to the		